

Application Serial No. 10/620,323

## REMARKS

Applicant thanks the Examiner for the courtesy of accepting Applicant's *bona fide* attempt to respond to the Examiner's previous OA and affording Applicant an opportunity to elaborate. Accompanying this response is a listing of claims as submitted with Applicant's Response of November 17, 2005. That is, Applicant has not changed the status of any claim from Applicant's previous response. Furthermore, Applicant's following comments make more sense with this claim status because Applicant's current comments are directed solely to the "new" claims, in accordance with the Examiner's Communication of February 28, 2006.

As background, Applicant first refers the Examiner to Claim 65 and Applicant's Response of November 17, 2005. In particular, in that response (as well as during the interview of September 18, 2005) Applicant pointed out that the prior art does not show, at least, a fork (or method) having: (1) a blow-off feature, valve, or threshold that is (2) adjustable, as set forth in the claim:

Now, concerning new claims 94-101, the independent claims should at least be patentable for similar reasons. Each of the independent claims at least contain the limitations that the fork (or method) has a first and second valve, that the second valve is adjustable, and the second valve opens when a threshold pressure is reached. As was discussed during the interview and in Applicant's prior response, a device having at least these limitations is patentable over the prior art.

Finally, concerning the newly presented dependent claims, while these claims should be patentable at least because they depend from allowable independent claims, each of these relatively short dependent claims contain distinct patentable limitations. For brevity, Applicant will not rehash the text of each of those dependent claims at this point.

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To assist the Examiner a more detailed comparison of Applicant's previously submitted claims and Applicant's Claims 94-101 is now provided. While the claims are of somewhat different scope and express the invention in somewhat different terms, each claim contains similar elements. Thus, the basis for avoiding the art with regard to Claim 65, likewise applies with regard to Claim 94. In particular:

- Claim 65 comprises a bicycle fork as noted with regard to Claim 94.
- Claim 65 comprises a compression fluid chamber configured to decrease in volume during at least a portion of the compression of the fork. Claim 94 likewise comprises a chamber configured to decrease in volume during at least a portion of the compression of the fork.
- Claim 65 comprises a lock-out valve having two positions, a first position allowing substantially unrestricted fluid flow and a second position in which a compression fluid chamber at least partially blocked. Claim 94 provides a valve that operates in the first position which a fluid flow is substantially unrestricted and a second position in which a fluid flow is at least partially blocked.
- Claim 65 provides an externally disposed adjuster that allows adjustment of the lock-out valve between at least two positions. Likewise, Claim 94 provides an adjuster that is positioned externally and that permits external adjustment of the valve between at least two positions
- Claims 65 provides a blow-off valve that allows a flow in response to pressure that is equal to or greater than a threshold pressure during compression of the fork. Likewise, Claim 94 provides a valve that allows a flow when pressure in a first chamber is equal to or greater than a threshold pressure
- Claim 65 provides a second externally disposed adjuster for adjusting a threshold pressure. Likewise, Claim 94 provides a second external adjuster for adjusting threshold pressure:

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- Finally, Claim 65 allows adjustment to threshold pressure to be made without the use of tools. Likewise, Claim 94 allows adjustment to threshold pressure to be made without the use of tools

Thus, while Claim 65 and Claim 94 are somewhat different in terminology and scope, each claim contains similar limitations. As such, the basis for avoiding the art of record with regard to Claim 65 applies equally with regard to Claim 94. That is, at least each and every limitation of Claim 65 which Applicant is relying upon to avoid the cited art is also found in Claim 94.

Claim 95 is dependent on Claim 94 and therefore, is at least of similar scope as Claim 94.

Claim 96 includes claim elements including an external adjuster on a bicycle fork for adjusting a damping fluid flow, a valve that allows a fluid flow when pressure in the fluid chamber is equal to or greater than a threshold pressure, an externally positioned adjuster for adjusting a threshold pressure, and the ability to make these external adjustments independently of each other. In this latter point, Claim 96 differs from Claim 65. However, previously presented Claim 78 provides that the external adjustments may be made where adjustments to one adjuster have no effect on the other adjuster. This is similar in scope to the limitation of Claim 96. A similar limitation is also found in previously presented Claim 80, Claim 82, Claim 84, etc. Accordingly, Claim 96 is distinguished from the art referenced on the same basis as the previously presented claims.

Claim 97, being dependent on Claim 96 is at least of similar scope to Claim 96, and, therefore, Applicant's statements with regard to the prior art apply likewise with regard to Claim 97.

Claims 98 and 99 contain similar elements as Claim 96. That is, a bicycle fork is provided having a first adjustable valve for fluid flow and a second adjustable

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valve which establishes an adjustable threshold pressure, where the ability to make adjustment to each of these valves is independent of the other valve. Accordingly, Applicant's comments above apply with regard to Claims 98 and 99.

Claims 100 and 101 are similarly concerned with the ability to independently adjust to valves in a bicycle fork. In particular, Claim 100 is directed to a bicycle fork that has first and second telescopic engaged tubes which move closer together during compression of the fork. A damping fluid is provided within said tubes and a first adjustable fluid flow control valve having a plurality of operator selectable positions is provided for inhibiting the first and second tubes from moving closer together. A second adjustable blow-off valve is provided that is independently adjustable relative to the first valve. The second valve allows first and second tubes to move closer together when the pressure on the damping fluid is equal to or greater than an operator's selective threshold pressure, even when the first valve is in its first position. As such, Applicant's comments with regard to the independence operation in Applicant's previous submission in connection with Applicant's previously presented claims apply likewise to Claims 100 and 101.

Finally, in the Supplemental IDS filed on February 08, 2006, Applicant provided a copy of an article written by Richard Cunningham, editor of *Mountain Bike Action* and one of the most respected commentators on mountain bike technology. The Examiner is invited to review this article (page 2, middle) in detail as Mr. Cunningham called the Fox product having an adjustable blow-off threshold an "innovation that has been long in coming." For the Examiner's convenience, another copy of this article is attached hereto.

In view of the foregoing, Applicant is of the opinion that Applicant has completely addressed the Examiner's comments in the Communication of February 28, 2006.

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If the Examiner deems it helpful, she is encouraged to contact Applicant's attorney, Michael A. Glenn at 650-474-8400.

Respectfully submitted,

  
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## FOX UNVEILS PRODUCTION SUSPENSION FORK--APRIL 5

By Richard Cunningham

On April fifth, with the World Cup venue at Domain Chandon winery as a backdrop, Bob Fox, president of Fox Racing Shox, made a short speech, announcing the company was entering the high-end fork market. Few mountain bike insiders were taken by surprise by the move. For us, it was a question of when, not if.

Fox is the most respected mountain bike shock maker by a huge margin, primarily because of its conservative approach to development and reluctance to over-extend itself. Bob Fox, an engineer who surfed his way into the suspension business in the '70s when motocross racing became a tidal wave in this country, stated that the decision to make front suspension was because of customer demand—and also because he felt that Fox could, "do it better." For the record, he was clear to point out that Fox would not attempt to make a fork for every price level. Instead, they would concentrate on and above the \$1100 range of bicycles for OEM manufacturers, as well as aftermarket sales. Expect to pay between \$400 and \$600 at bike dealers for your personal copies.

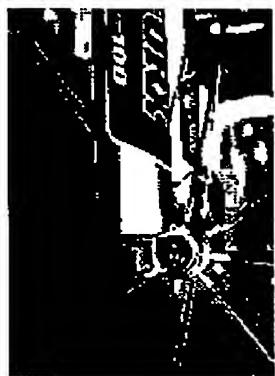


### WHAT ABOUT THE FORKS

Fox calls them Forx, and there are two platforms: The Vanilla—a coil/over version targeted at aggressive trail riders and the freeriding set, and the Float—an air-sprung, lighter weight fork for XC buffs. Here are the bullet points:

1--The leader of the Fox Forx development team, Mike McAndrews, said that they couldn't divulge the exact details of the internals because of unresolved patent issues. He did say that both the Vanilla and Float platforms use the same hydraulics. We do know that the damper is an open-bath cartridge in the left side that uses a combination of shim-stacks and bypass circuits to control high- and low-speed damping.

2-Both the Vanilla and Float models will be offered in three levels, depending upon the damper options: The "R" version stands for rebound control only; the "RL" models offer rebound and a lockout feature; and the "RLC" has a rebound dial, a lockout lever and a compression adjustment ring. All three adjustments are on a concentric shaft on the right fork crown—the red dial on top is rebound, the blue dial with the lever in the center is a lockout control, and the serrated ring on the bottom is the compression clicker.



3—An innovation that has been long in coming is Fox's low speed compression knob. Located on the lower end of the right fork slider, the blue aluminum knob allows you to select the threshold where the lockout valving blows free and allows the fork to move. Without a "blow-off" safety valve, a completely locked out damper would self destruct when you hit a substantial bump. Many racers use the blow off circuit as their primary compression damper, because they feel that the fork should only move when it contacts a big hit. The adjustable blow-off, lends some sophistication to this foolish trend.



and constant wall thickness. Fox uses a special hard-anodization process on the legs that retains a film of oil to reduce friction.

4--The forged aluminum crown and cast-magnesium, one-piece sliders are common to all models. The steerers and fork legs are beefier on the longer-stroke models. The legs are 32mm in diameter (that's big)

5—Color? You won't get a choice here--nor will OEM customers. Fox believes that performance, not gimmicky colors and graphics will communicate their message best. The entire line receives Fox's silver, blue and black logos (exactly like their shocks). Vanilla models are painted black, the Float options are hard anodized--a process that gives them a gold appearance.

6—Travel options are offered in every model. The cross-country Floats will initially offer an 80mm or 100mm option—although a model with 80mm, 100mm, and 125mm is listed in the Fox

information packet. All Vanilla Forx share the 125mm, 100mm, and 80mm options. You cannot alter the travel without disassembling the fork, but Fox says it will be a relatively easy process. Vanilla Forx will sell in the 100mm and 125mm setting. If you really want to squeak around the patch with an 80mm fork, it's up to you to switch it out.



7—The Float air/oil fork employs a two-stage coil-type negative spring that doubles as a top-out cushion. The negative spring is non-adjustable—unless you are willing to disassemble the fork and replace them (Fox does carry different spring rates). Vanilla Forx use a coil spring in both legs. The left side is adjustable with a preload knob on the crown, or by replacing it with a different rate. The right-side spring is considered a “helper” and is not adjustable.

8—“No plastic.” was the war cry at the Fox debut. Fox officials insisted that the damper knobs, preload dial and removable caps were all machined aluminum. Special care was given to make the detent clickers in the fork’s various adjustment features feel crisp and drag free.

9—Weight? Well, Fox won’t be able to compete with the 2.5-pound RockShox SID Race in this department. Fox claimed their lightest Float model weighs in at 3.57 pounds. The longest travel Vanilla with all the damping control options weighs a claimed, 4.11 pounds. As conservative as Fox is, the production models may actually weigh less than anticipated. When pressed, Bob Fox admitted that an ultra light weight XC version is already in the development stages. Fox did not pursue the title for the lightest fork on the planet because they felt the demand was greatest for a sharp-steering, high-performance trailbike fork. We believe they are right on the money there.

10—Other details that should make potential Fox Forx owners happy are plans to have fork service centers in place throughout the world, that fact that Fox Forx are made right here in the USA, and that almost every item is manufactured in-house at Fox’s Watsonville factory. Fox says that they have booked a few OEM customers for 2002 model bikes, and that you should be able to get a fork at our local dealers by mid-July. Our test fork is coming soon, so keep an eye out for a comprehensive test.

For more information, or just to say hello, log onto the Fox website at: [www.foxracingshox.com](http://www.foxracingshox.com)

#### FOX ADS LOCKOUT TO COIL/ OVER DAMPER

In a move, targeted at the emerging freeride and longer-travel trailbike



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movement, Fox developed a coil/over Vanilla shock with the same lockout lever as its popular Float RLC air shock. The Vanilla RLC will deliver a more supple ride, and a more linear feel than the air-sprung version. Fox's Mike McAndrews also noted that softer-long-travel suspension designs benefit more from a lockout than firm XC types.

